Express Mail Label No. EV 017 038 455 US

**PATENT** 

Docket No 040106.90055

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

SAH

Applicant:

Inøue

054267

Appl No.:

--- ' <sub>1</sub>

Filed:

January 22, 2002

For:

CYCLONIC VACUUM CLEANER

Art Unit:

1744

MOORE

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

Please enter the following information in the file of the above application for consideration during examination of this application. Attached is a Form PTO-1449, which lists the items of prior art which came to the attention of the under-signed. A copy of these items are submitted herewith.

The relevancy of the prior art with the invention of Japanese Un-Examined Patent Publication No. 2000-135183 for "Vacuum Cleaner" is as follows.

According to the vacuum cleaner disclosed in this publication, a vortex flow is generated along an inside surface of a cylindrical dust container. This vortex flow falls down toward a bottom plate of the cylindrical dust-collecting portion, while the dusts included in the vortex flow are allowed to whirl around along the inside surface thereof due to a centrifugal force, whereby the dusts are collected in a bottom portion by such centrifugal force and downwardly-directing force developed by the descending vortex flow. The vortex flow which the dusts were removed in this way is then allowed to rise up from near the

QBMKE\ 5185267.1

center of the bottom plate of the said cylindrical dust collection portion so that it is discharged to the outside. According to this conventional cyclonic vacuum cleaner, however, fine or comparatively light dusts also are allowed to ascend together with the vortex flow, which, in association with the fact that vent hole of the rear end pipe is opposite to the bottom plate of the cylindrical dust collecting portion, are likely to be discharged from the vent hole to the outside of the cyclonic separation dust collection device. A known solution for such problem is to cover the vent hole with a meshed member such as a filter. In that case, however, such filter is liable to be clogged with loose dust and the like, thus lowering the vacuum efficiency of an electric fan unit.

It is hoped that this submission of prior art will assist the examination.

Respectfully submitted,

Dated: January 22, 2002

By:

Michael J. MoGovern Registration No. 28,326 Quarles and Brady LLP 411 East Wisconsin Ave.

Milwaukee, WI 53202

(414) 277-5725

ę